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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/545,367	04/07/2000	John Piechnick	6125/54125	1304

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EXAMINER

NGUYEN, TUYEN T

ART UNIT

PAPER NUMBER

2832

DATE MAILED: 12/02/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/545,367

Applicant(s)
Piechnick

Examiner
Tuyen T. Nguyen

Art Unit
2832



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Sep 16, 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above, claim(s) 17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 6) ☐ Other:

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DETAILED ACTION

Election/Restriction

1. Newly submitted claim 17 is directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: The limitation of the first and second structure are offset such that *the first PCB and second PCB are on different planes so as to provide additional creepage distance between the primary and secondary windings* was not previously presented.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claim 17 is withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1 and 15-16 are rejected under 35 U.S.C. 102() as being by Eng, Jr. et al. [US 4,857,878].

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Eng, Jr. et al. discloses a transformer [figures 1-2] comprising a bobbin structure [100] with primary and secondary windings wound thereabout, said the bobbin structure comprising:

- a first bobbin member [200] including a first body portion defining a first hollow region, axially spaced walls [302, 226, 224] extending radially away from the first body portion, and a tubular portion [205] extending away from the first body portion; and

- a second bobbin member [202] including a second body portion defining a second hollow region, the second body portion comprising two sections [see figure 3] at the periphery of the second hollow region forming a recess separate from the second hollow region, the recess shaped such that the tubular portion is positioned therewithin for joining the first and second bobbin members, axially spaced walls [212, 210] extending radially away from the second body portion, and a flange/lip [210b, figures 1-2] on one of the axially spaced walls of the second bobbin member and extending away from another of the axially spaced walls of the second bobbin member; and

wherein the first bobbin member is disposed adjacent to the second bobbin member and is partially enclosed by the flange/lip, the primary and secondary windings respectively wound about the first and second body portions, and wherein the first and second hollow regions are shaped to receive a core structure [102, 103] inserted therewithin.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2 and 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eng, Jr. et al. in view of Tobben et al. [US 4,596,974].

Eng, Jr. et al. discloses the instant claimed invention except for the flanges/lips being *substantially* perpendicular to each other.

Tobben et al. discloses a transformer [figures 1 and 3] comprising a bobbin structure with primary and secondary windings wound thereabout, said the bobbin structure comprising:

- a first bobbin member [1] including a first body portion defining a first hollow region, axially spaced walls [9, 11] extending radially away from the first body portion;

- a second bobbin member [3] including a second body portion defining a second hollow region, axially spaced walls [21, 23] extending radially away from the second body portion, and a flanges [31, 33, 35] on one of the axially spaced walls of the second bobbin member and extending away from another of the axially spaced walls of the second bobbin member; and

- a plurality of terminal pins [29].

wherein the primary and secondary windings respectively wound about the first and second body portions.

wherein the first and second hollow regions are shaped to receive a core structure [47] inserted therewithin.

wherein the flanges being substantially perpendicular to each other.

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It would have been obvious to one having ordinary skilled in the art at the time the invention was made to use the flange design of Tobben et al. in the bobbin structure of Eng, Jr. et al. for the purpose of providing a creepage distance for the device.

6. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Eng, Jr. et al.

Eng, Jr. et al. discloses the instant claimed invention except for the tubular portion has a rectangular cross-section.

The particular shape/cross-section of the tubular portion would have been an obvious design consideration based on the intended application/environment use.

7. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Eng, Jr. et al. in view of Dobberstein [US 4,549,130].

Eng, Jr. et al. discloses the instant claimed invention except for a *substantially planar conductive shield* disposed between the first and second bobbin members.

Dobberstein discloses a transformer including a bobbin structure, primary and secondary windings and a conductive shield member [123].

It would have been obvious to one having ordinary skilled in the art at the time the invention was made to include a conductive shield member design of Dobberstein in Eng, Jr. et al. for the purpose of reducing interference.

The specific shape/design of the conductive shield member would have been an obvious design consideration based upon the intended applicant use.

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8. Claims 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eng, Jr. et al. in view of Tobben et al. as applied to claim 2 above, and further in view of Equi et al. [US 4,939,623].

Eng, Jr. et al. in view of Tobben et al. discloses the instant claimed invention except for PCB mounting structure and its location relative to the flange/walls.

Equi et al. discloses a transformer including a PCB mounting structure [see figure 3].

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include a mounting structure in the bobbin structure of Eng, Jr. et al., as modified, as suggested by Equi et al. for the purpose providing a mounting structure for the PCB.

The specific location/arrangement of the mounting structure would have been an obvious design consideration based upon the environment/application use.

9. Claims 10-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tobben et al. in view of Equi et al.

Tobben et al. discloses the instant claimed invention except for a PCB mounting structure and its location relative to the flange/walls.

Equi et al. discloses a transformer including a PCB mounting structure [see figure 3].

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include a mounting structure in the bobbin structure of Eng, Jr. et al., as modified, as suggested by Equi et al. for the purpose providing a mounting structure for the PCB.

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Response to Arguments

10. Applicant's arguments with respect to claims 1-16 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Tuyen T. Nguyen whose telephone number is (703) 308-0821.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Elvin Enad, can be reached at (703) 308-7619. The fax number for this Group is (703)872-9318 before the final office action, if the response is after final office action the fax number is (703)872-9319.

Any inquiry of a general nature or relating to status of this application of proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.

TTN *TTN*

November 25, 2002

Tuyen T. Nguyen